AMENDMENTS TO THE CLAIMS

1. (Currently amended) Therapeutic aerosol device comprising:

a) a nebuliser device including

aa. an aerosol generator to which a gaseous medium for the generation of a main aerosol flow may be supplied from a supply device, and

bb. a pressure connection device to supply pressure fluctuations which are superimposed on the aerosol main flow,

b) a nosepiece configured to supply the aerosol into one of the two alae of the nose of a user connected to the nebuliser device, and

c) a flow resistance device configured to be placed at the other of the two alae of the user's nose, the flow resistance device, in the absence of any device to ~~close the oropharyngeal velum~~ seal the nasal cavities from the throat and mouth, causing aerosol from the main aerosol flow having pressure fluctuations superimposed thereon to reach the paranasal sinuses of the user and to be deposited therein.

2. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the supply device is a compressed air supply device and the aerosol generator is a nebuliser nozzle with a compressed air channel opening into a nozzle opening, and with at least one suction channel through which a liquid to be nebulised is drawn in.

3. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the nosepiece is configured at one end for attachment to a connecting piece in the nebuliser device and at the other end is configured for introduction into one nostril and the tight sealing of one of a user's nostrils.

4. (Previously presented) Therapeutic aerosol device according to claim 3, wherein the other end of the nosepiece is configured in the form of a truncated cone.

5. (Previously presented) Therapeutic aerosol device according to claim 4, wherein the truncated cone shaped end of the nosepiece has a longitudinal axis, which is inclined relative to the longitudinal axis of the connecting piece of the nebuliser device.

6. (Previously presented) Therapeutic aerosol device according to claim 5, wherein the angle between the longitudinal axes of the truncated cone shaped end and of the connecting piece is in the range of from 30° to 75°.

7. (Previously presented) Therapeutic aerosol device according to claim 3, wherein the other end of the nosepiece is configured with a balloon device that may be inflated by the supply of compressed air in order to ensure a reliable and tight fit of the nosepiece in one of a patient's nostrils.

8. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the flow resistance device is configured for introduction into the other of the user's nostrils.

9. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the flow resistance device is configured to have an opening smaller than the user's nostril.

10. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the flow resistance device comprises a filter device.

11. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the flow resistance device is connected to the nosepiece by a connecting element.

12. (Previously presented) Therapeutic aerosol device according to claim 11, wherein the flow resistance device is embodied in one piece with the nosepiece.

13. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the flow resistance device is a stopper in particular a stopper with a hollow space.

14. (Previously presented) Therapeutic aerosol device according to claim 13, wherein the stopper is embodied in the form of a truncated cone.

15. (Previously presented) Therapeutic aerosol device according to claim 13, wherein the stopper is embodied in a bell shape with a first area with a large diameter and a second diameter with a small diameter.

16. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the nebuliser device comprises an air inlet flue and the pressure connection device is intended to supply pressure fluctuations at the air inlet flue.

17. (Previously presented) Therapeutic aerosol device according to claim 16, wherein the pressure connection device comprises a meander-shaped guide for the compressed air.

18. (Previously presented) Therapeutic aerosol device according to claim 1, wherein compressed air is supplied through the pressure connection device.

19. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the frequency of the pressure fluctuations lies within the range from 10 to 100 Hz.

20. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the pressure fluctuations are generated by means of a membrane compressor comprising a membrane that seals a pressure chamber in a pressure-tight way and is moved to and fro by a piston rod.

21. (Previously presented) Therapeutic aerosol device according to claim 20, wherein the pressure chamber comprises a connecting piece for the connection of a hose line which is connected to the pressure connection device in the nebuliser device.

22. (Previously presented) Therapeutic aerosol device according to claim 1, wherein a sensor device to determine the main aerosol flow or the pressure fluctuations is provided on the flow resistance device.

23. (Previously presented) Therapeutic aerosol device according to claim 22, wherein an evaluation device and a display device are connected to the sensor device to indicate to the patient whether the main aerosol flow or the pressure fluctuations are sufficiently within the area of the flow resistance device.

24. (Previously presented) Therapeutic aerosol device according to claim 22, wherein the sensor device comprises a movable display element which is arranged in a display section of the sensor device and is moved by the main aerosol flow or the pressure fluctuations.

25. (Previously presented) Therapeutic aerosol device according to claim 1 for the application of one or more of the following substances:

substances with an anti-inflammatory action, for example: betamethasone, beclomethasone, budesonide, ciclesonide, dexamethasone, desoxymethasone, fluoconolone acetonide, flucinonide, flunisolide, fluticasone, icomethasone, rofleponide, triamcinolone acetonide, fluocortin butyl, hydrocortisone aceponate, hydrocortisone buteprate buteprate, hydroxycortisone-17-butyrate, prednicarbate, 6-methylprednisolone aceponate, mometasone furoate, elastane-, prostaglandin-, leukotriene-, bradykinin- antagonists, non-steroidal anti-inflammatory drugs (NSAIDs) and/or

anti-infective agents, for example: antibiotics with or without beta-lactamase inhibitors, for example clavunalic acid, sulbactam, tazobactam, etc. from the class of

penicillins, for example: benzylpenicillins (penicillin-G-sodium, clemizone penicillin, benzathine penicillin G); phenoxypenicillins (penicillin V, propicillin); aminobenzylpenicillins (ampicillin, amoxycillin, bacampicillin), acylaminopenicillins (azlocillin, mezlocillin, piperacillin, apalcillin), carboxypenicillins (carbenicillin, ticarcillin, temocillin), isoxazolyl penicillins (oxacillin, cloxacillin, dicloxacillin, flucloxacillin), amiidine penicillin (mecillinam), cefalosporins, for example: cefazolins (cefazolin, cefazedone); cefuroximes (cerufoxim, cefamdole, cefotiam); cefoxitins (cefoxitin, cefotetan, latamoxef, flomoxef); cefotaximes (cefotaxime, ceftriaxone, ceftizoxime, cefmenoxime); ceftazidimes (ceftadzidime, cefpirome, cefepime); cefalexins (cefalexin, cefaclor, cefadroxil, cefradine, loracarbef, cefprozil); cefiximes (cefixime, cefpodoxim proxetile, cefuroxime axetil, cefetamet pivoxil, cefotiam hexetil),cabapenems and combinations, for example imipenem ± cilastin, meropenem, biapenem monobactams (aztreonam), the above antibiotics and/or

aminoglycosides, for example: gentamicin, amikacin, isepamicin, arbekacin, tobramycin, netilmicin, spectinomycin, neomycin, paromoycin, kanamycin, and/or

macrolides, for example: erythromycin, clarythromycin, roxithromycin, azithromycin, dithromycin, josamycin, spiramycin, and/or

gyrase inhibitors, for example: ciprofloxacin, gatifloxacin, norfloxacin, ofloxacin, levofloxacin, perfloxacin, lomefloxacin, fleroxacin, clinafloxacin, sitafloxacin, gemifloxacin, balofloxacin, trovafloxacin, moxifloxacin, and/or

antibiotics of other classes, for example: tetracyclines (doxycycline, minocycline), glycopeptides (vancomycin, teicoplanin, peptide 4), polymyxins (polymyxin B, colistin), tithromycin, lincomycin, clindamycin, oxazolindiones (linzezolids), chloramphenicol, fosfomycin, rifampicin, isoniazid, cycloserine, terizidone, ansamycin pentamidine, and/or

sulfonamides and combinations, for example: sulfadiazine, sulfamethoxazole, sulfalene, co-trimoxazole, co-trimetrol, co-trimoxazine, co-tetraxazine, and/or

nitroimidazoles and nitrofurans, for example, metronidazole, tinidazole, ornidazole, nitrofurantoin, nitrofuranzone, and/or

antimycotics, for example: azole derivatives (clotrimazole, oxiconazole, miconazole, ketoconazole, itraconazole, fluconazole); polyene antibiotics (amphotericin B, natamycin, nystatin, flucocytosine, and/or

virustatics, for example: podophyllotoxin, vidarabine, tromantadine, zidovudine, proteinase inhibitors, alone or also in combination with:

extracts or ingredients of plants, for example: camomile, hamamelis, echiancea and calendula extract, essential oils (eucalyptus oil, camomile oil, pine needle oil, spruce needle oil, peppermint oil, thyme oil, rosemary oil), bisabol oil, cineole, myrtol, thymol, menthol, camphor and/or

wound treatment agents and anti-oxidants, for example: dexpanthenol, iodine povidone, tannin, bismuth salts, allantoin, zinc compounds, vitamins and trace elements, cod liver oil extract, tocopherols, glutathione, ascorbic acid, and/or

antiseptics: acridine derivatives, benzoates, rivanol, chlorhexetidine, quarternary ammonium compounds, cetrimides, biphenylol, clorofene, octenidine, and/or

mucolytics, for example: acetylcysteine, carbocysteine, ambroxol, bromhexine, tyloxapol, recombined surfactant proteins, DNase and/or

substances to reduce swelling of the mucous membrane, for example: phenylephrine, naphazoline, tramazoline, tetryzoline, oxymetazoline, fenoxazoline, xylometazoline, epinephrine, isoprenaline, hexoprenaline, ephedrine, anti-allergic agents (DSCG), heparin, heparinoids, and/or

local anaesthetics, for example: tetracaine, procaine, lidocaine.

26. (Previously presented) Therapeutic aerosol device according to claim 25, wherein application by means of a therapeutic aerosol device in accordance with claim 1 takes place in such a way that aerosol droplets with a diameter of less than 10 μm are generated.

27. (Previously presented) Therapeutic aerosol device according to claim 25, wherein at least one of the substances is used as a liposome, suspension or emulsion in the micrometer range with a geometric diameter of less than approximately 1 μm.

28. (Previously presented) Therapeutic aerosol device according to claim 1, integrated into a handheld device.

29. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the supply device comprises an air supply device which supplies air.

30. (Previously presented) Therapeutic aerosol device according to claim 1, wherein the supply device comprises a compressed air supply device which supplies compressed air.

31. (Previously presented) Therapeutic aerosol device according to claim 4, wherein the truncated cone has an aperture angle α in a range of from 10° to 40°.

32. (Previously presented) Therapeutic aerosol device according to claim 14, wherein the truncated cone has an aperture angle α in a range of from 10° to 40°.

33. (Previously presented) Therapeutic aerosol device according to claim 19, wherein the frequency of the pressure fluctuations lies within the range from 15 to 55 Hz.

34. (Previously presented) Therapeutic aerosol device according to claim 26, wherein aerosol droplets with a diameter of approximately 2 to 5 μm are generated.